RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 100

Source:
Date Processed by STIC:

ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 01/04/2005 PATENT APPLICATION: US/10/009,431 TIME: 09:37:40

Input Set : A:\PTO.YF.txt

Output Set: N:\CRF4\01042005\J009431.raw

```
3 <110> APPLICANT: Unsicker, Klaus.
         Krieglstein, Kerstin.
 6 <120> TITLE OF INVENTION: Neuroprotective properties of GDF-15, a novel member of
         the TGF-BETA superfamily
 9 <130> FILE REFERENCE: MBP-007XX
11 <140> CURRENT APPLICATION NUMBER: US 10/009,431
12 <141> CURRENT FILING DATE: 2002-2-13
14 <150> PRIOR APPLICATION NUMBER: PCT/EP00/04445
15 <151> PRIOR FILING DATE: 2000-05-16
17 <150> PRIOR APPLICATION NUMBER: EP 99 109 714.8
18 <151> PRIOR FILING DATE: 1999-05-17
21 <160> NUMBER OF SEQ ID NOS: 7
23 <170> SOFTWARE: PatentIn Ver. 2.1
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 888
27 <212> TYPE: DNA
28 <213> ORGANISM: Homo sapiens
30 <400> SEQUENCE: 1
31 atgeteetgg tgttgetggt getetegtgg etgeegeatg ggggegeeet gtetetggee 60
32 gaggcgagcc gcgcaagttt cccgggaccc tcagagttgc actccgaaga ctccagattc 120
33 cgagagttgc ggaaacgcta cgaggacctg ctaaccaggc tgcgggccaa ccagagctgg 180
34 gaagattega acaccgacct cgtcccggcc cctgcagtcc ggatactcac gccagaagtg 240
35 eggetgggat eeggeggeea eetgeaeetg egtatetete gggeegeeet teeegagggg 300
36 ctccccgagg cctcccgcct tcaccgggct ctgttccggc tgtccccgac ggcgtcaagg 360
37 tegtgggaeg tgacaegaee getgeggegt eageteagee ttgcaagaee eeaggegeee 420
38 gegetgeace tgegactgte geegeegeeg tegeagtegg accaactget ggeagaatet 480
39 tegteegeae ggeeceaget ggagttgeae ttgeggeege aageegeeag ggggegeege 540
40 agagegegtg egegeaaegg ggaegaetgt eegeteggge eegggegttg etgeegtetg 600
41 cacaeggtee gegegteget ggaagaeetg ggetgggeeg attgggtget gtegeeaegg 660
42 gaggtgcaag tgaccatgtg categgegeg tgeeegagee agtteeggge ggcaaacatg 720
43 cacgegeaga teaagaegag cetgeacege etgaageeeg acaeggtgee agegeeetge 780
44 tgcgtgcccg ccagctacaa tcccatggtg ctcttacaaa agaccgacac cggggtgtcg 840
45 ctccagacct atgatgactt gttagccaaa gactgccact gcatatga
48 <210> SEQ ID NO: 2
49 <211> LENGTH: 339
50 <212> TYPE: DNA
51 <213> ORGANISM: Homo sapiens
53 <400> SEQUENCE: 2
54 gegegeaacg gggaegactg teegeteggg ceegggegtt getgeegtet geacacggte 60
55 egegegtege tggaagacet gggetgggee gattgggtge tgtegeeaeg ggaggtgeaa 120
56 gtgaccatgt gcatcggcgc gtgcccgagc cagttccggg cggcaaacat gcacgcgcag 180
57 atcaagacga geetgeaceg cetgaageee gacaeggtge eagegeeetg etgegtgeee 240
```

58 gccagctaca atcccatggt gctcttacaa aagaccgaca ccqqqqtqtc qctccaqacc 300

RAW SEQUENCE LISTING DATE: 01/04/2005
PATENT APPLICATION: US/10/009,431 TIME: 09:37:40

Input Set : A:\PTO.YF.txt

Output Set: N:\CRF4\01042005\J009431.raw

```
59 tatgatgact tgttagccaa agactgccac tgcatatga
                                                                      339
62 <210> SEQ ID NO: 3
63 <211> LENGTH: 295
64 <212> TYPE: PRT
65 <213> ORGANISM: Homo sapiens
67 <400> SEQUENCE: 3
68 Met Leu Leu Val Leu Val Leu Ser Trp Leu Pro His Gly Gly Ala
                                        10
71 Leu Ser Leu Ala Glu Ala Ser Arg Ala Ser Phe Pro Gly Pro Ser Glu
74 Leu His Thr Glu Asp Ser Arg Phe Arg Glu Leu Arg Lys Arg Tyr Glu
                                40
77 Asp Leu Leu Thr Arg Leu Arg Ala Asn Gln Ser Trp Glu Asp Ser Asn
                            55
80 Thr Asp Leu Val Pro Ala Pro Ala Val Arg Ile Leu Thr Pro Glu Val
                        70
83 Arg Leu Gly Ser Gly Gly His Leu His Leu Arg Ile Ser Arg Ala Ala
86 Leu Pro Glu Gly Leu Pro Glu Ala Ser Arg Leu His Arg Ala Leu Phe
               100
                                   105
89 Arg Leu Ser Pro Thr Ala Ser Arg Ser Trp Asp Val Thr Arg Pro Leu
                               120
92 Arg Arg Gln Leu Ser Leu Ala Arg Pro Gln Ala Pro Ala Leu His Leu
      130
                           135
95 Arg Leu Ser Pro Pro Pro Ser Gln Ser Asp Gln Leu Leu Ala Glu Ser
                       150
                                           155
98 Ser Ser Ala Arg Pro Gln Leu Glu Leu His Leu Arg Pro Gln Ala Ala
                   165
                                     . 170
101 Arg Gly Arg Arg Arg Ala Arg Ala Arg Asn Gly Asp His Cys Pro Leu
                                    185
104 Gly Pro Gly Arg Cys Cys Arg Leu His Thr Val Arg Ala Ser Leu Glu
            195
                                200
107 Asp Leu Gly Trp Ala Asp Trp Val Leu Ser Pro Arg Glu Val Gln Val
                            215
110 Thr Met Cys Ile Gly Ala Cys Pro Ser Gln Phe Arg Ala Ala Asn Met
111 225
                       230
                                            235
113 His Ala Gln Ile Lys Thr Ser Leu His Arg Leu Lys Pro Asp Thr Val
                    245
                                        250
116 Pro Ala Pro Cys Cys Val Pro Ala Ser Tyr Asn Pro Met Val Leu Ile
               260
                                    265
119 Gln Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu Leu
           275
                                280
122 Ala Lys Asp Cys His Cys Ile
       290
127 <210> SEQ ID NO: 4
128 <211> LENGTH: 112
129 <212> TYPE: PRT
130 <213> ORGANISM: Homo sapiens
132 <400> SEQUENCE: 4
```

RAW SEQUENCE LISTING DATE: 01/04/2005 PATENT APPLICATION: US/10/009,431 TIME: 09:37:40

Input Set : A:\PTO.YF.txt

Output Set: N:\CRF4\01042005\J009431.raw

133 Ala Arg Asn Gly Asp His Cys Pro Leu Gly Pro Gly Arg Cys Cys Arg 136 Leu His Thr Val Arg Ala Ser Leu Glu Asp Leu Gly Trp Ala Asp Trp 137 20 139 Val Leu Ser Pro Arg Glu Val Gln Val Thr Met Cys Ile Gly Ala Cys 140 40 142 Pro Ser Gln Phe Arg Ala Ala Asn Met His Ala Gln Ile Lys Thr Ser 145 Leu His Arg Leu Lys Pro Asp Thr Val Pro Ala Pro Cys Cys Val Pro 146 65 70 148 Ala Ser Tyr Asn Pro Met Val Leu Ile Gln Lys Thr Asp Thr Gly Val 85 90 151 Ser Leu Gln Thr Tyr Asp Asp Leu Leu Ala Lys Asp Cys His Cys Ile 152 100 105 159 <210> SEQ ID NO: 5 160 <211> LENGTH: 13 161 <212> TYPE: PRT 162 <213> ORGANISM: Homo sapiens 164 <400> SEOUENCE: 5 165 Met Pro Gly Gln Glu Leu Arg Thr Leu Asn Gly Ser Gln 166 1 170 <210> SEQ ID NO: 6 171 <211> LENGTH: 15 172 <212> TYPE: PRT 173 <213> ORGANISM: Artificial Sequence 175 <220> FEATURE: 176 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide 177 derived from the murine and rat C-terminal 178 . sequence of GDF-15 180 <400> SEQUENCE: 6 181 His Arg Thr Asp Ser Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu 182 1 10 186 <210> SEQ ID NO: 7 187 <211> LENGTH: 15 188 <212> TYPE: PRT 189 <213 > ORGANISM: Homo sapiens 191 <220> FEATURE: 192 <221> NAME/KEY: PEPTIDE 193 <222> LOCATION: (1)..(15) 194 <223> OTHER INFORMATION: Peptide corresponds to amino acids 273 to 287 of human pre-pro-mature GDF-15 197 <400> SEQUENCE: 7 198 Gln Lys Thr Asp Thr Gly Val Ser Leu Gln Thr Tyr Asp Asp Leu 199

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/009,431

DATE: 01/04/2005 TIME: 09:37:41

Input Set : A:\PTO.YF.txt

Output Set: N:\CRF4\01042005\J009431.raw

L:12 M:256 W: Invalid Numeric Header Field, Wrong Current FILING DATE:YYYY-MM-DD